



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
Group Art Unit 2125

In re

Patent Application of

Jay S. Bayne

Application No. 10/678,297

Confirmation No. 3490

Filed: October 3, 2003

Examiner: Chad Rapp

“METHOD AND SYSTEM FOR NETWORK-  
BASED, DISTRIBUTED, REAL-TIME  
COMMAND AND CONTROL OF AN  
ENTERPRISE”

**MAIL STOP ISSUE FEE**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

I, Karen J. Kline, hereby certify that this correspondence is being deposited with the US Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date of my signature.

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*Karen J. Kline*  
1/10/07

**COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE UNDER 37 CFR**  
**1.104(e)**

Sir:

Applicants wish to comment on the Examiner's Statement of Reasons for Allowance set forth in the Notice of Allowance dated October 10, 2006 by pointing out that the reasons set forth by the Examiner appear to generalize some of the features of the independent claims. Therefore, the reasons set forth by the Examiner are not the only reasons the claims are allowable. The claims may include additional patentable features or combinations of features not mentioned by the Examiner.

With respect to independent Claim 1, the prior art does not teach or suggest a method of creating an enterprise control architecture comprising:

establishing five echelons of control, a first echelon, a second echelon, a third echelon, a fourth echelon, and a fifth echelon, each echelon having an one or more objects, the first echelon having an object that encapsulates a production process, the second echelon having an object that provides control over the production process, the third echelon having an object that coordinates processes executed at the first echelon in light of enterprise objectives, the fourth echelon having an object that provides planning and development functions, the fifth echelon having an object that provides supervisory control and that determines the enterprise objectives; and

connecting each of the five echelons with a plurality of control links.

Dependent claims 2-5 depend from independent Claim 1, and are therefore allowable. In addition, these claims may contain additional patentable subject matter.

With respect to independent Claim 6, the prior art does not teach or suggest a method creating an enterprise control architecture comprising:

dividing a system into multiple levels,

for each level, establishing five echelons of control, a first echelon, a second echelon, a third echelon, a fourth echelon, and a fifth echelon, each echelon having an one or more objects, the first echelon having an object that encapsulates a production process, the second echelon having an object that provides control over the production process, the third echelon having an object that coordinates processes executed at the first echelon in light of enterprise objectives, the fourth echelon having an object that provides planning and development functions, the fifth echelon having an object that provides supervisory control and that determines the enterprise objectives;

configuring each object of the first echelon such that each object may include an information ports;

configuring the third echelon to include an object that audits performance of processes at the first echelon; and

connecting each of the five echelons with a plurality of control links.

Dependent claims 7-11 depend from independent Claim 6, and are therefore allowable. In addition, these claims may contain additional patentable subject matter.

With respect to independent Claim 12, the prior art does not teach or suggest an enterprise control system comprising:

a plurality of value production units connected in an addressable grid, each production unit having

a first echelon, a second echelon, a third echelon, a fourth echelon, and a fifth echelon, each echelon having an one or more objects, the first echelon having an object that encapsulates a production process and that includes an information port, the second echelon having an object that provides control over the production process, the third echelon having an object that coordinates processes executed at the first echelon in light of enterprise objectives and an object that audits performance of processes at the first echelon, the fourth echelon having an object that provides planning and development functions, the fifth echelon having an object that provides supervisory control and that determines the enterprise objectives; and

a plurality of control links connecting each of the five echelons.

Dependent claims 13-18 depend from independent Claim 12, and are therefore allowable. In addition, these claims may contain additional patentable subject matter.

With respect to independent Claim 19, the prior art does not teach or suggest a method of network-based, real-time command and control of an enterprise comprising:

providing a communications network;

providing an interface for connecting to the network;

providing an application interface for connecting to an enterprise application;

providing one or more value production units, each value production unit having four full-duplex ports;

providing a router to dynamically create connections between the one or more value production units;

providing one or more enterprise process controls, at least some of the one or more enterprise process controls coupled to at least some of the one or more value production units; and

providing at least one enterprise management interface.

With respect to independent Claim 20, the prior art does not teach or suggest a system of network-based, real-time command and control of an enterprise comprising:

an enterprise operating system having an interface layer, a performance measurement layer, a process control layer, and a performance management layer;

one or more value production units, each value production unit having four full-duplex ports and interfaced with the performance measurement layer of the enterprise operating system; and

a router to dynamically create connections between the one or more value production units.

With respect to independent Claim 22, the prior art does not teach or suggest an enterprise operating system comprising:

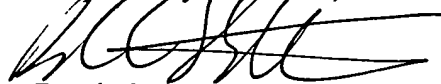
a network interface layer configured to support one or more virtual machine services and one or more application interfaces;

a performance measurement layer configured to support one or more value production processes;

a process control layer configured to support one or more supervisory processes; and

a management interface layer including configured to support one or more enterprise management interfaces.

Respectfully submitted,



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